

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of: Ole K. Nilssen  
Entitled: INVERTER CIRCUITS  
Serial Number: 06/787,692  
Filing Date: 10/15/85  
Art Unit: 212  
Examiner: WILLIAM H. BEHA

#62 Appeal Brief

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GROUP 210

REVISED APPEAL BRIEF

88-3439

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

I, OLE K. NILSSEN, HEREWITH  
CERTIFY THAT THE DATE OF  
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IS: 1-29-88

Pursuant to Notice of Appeal, which -- according to Examiner's communication dated 01/21/88 -- was filed on November 30, 1987, and in response to Examiner's communication dated January 21, 1988, Applicant herewith provides a Revised Brief in accordance with 37 U.S.C. 1.192.

Applicant submitted an original Appeal Brief on 12/26/87. However, that original Appeal Brief was returned to Applicant for failure to comply with 37 CFR 1.3 relating to "decorum and courtesy". The occasion for this holding of insufficient "decorum and courtesy" related to Applicant's allegation and arguments to the effect that Examiner does not possess ordinary skill in the art relevant to the claimed invention and is therefore not qualified to render any official opinions with respect to what might be obvious versus unobvious to a person who does possess ordinary skill in the relevant art.

The \$65.00 fee for instant Revised Appeal Brief was paid (Check #1089) in connection with as-yet-unprocessed Appeal Brief submitted on 09/04/86.

Moreover, the \$65.00 fee for the Notice of Appeal submitted 10/27/87 was inadvertently paid twice: once with Check #1087 accompanying a first Notice of Appeal submitted on 09/02/86, and once with Check #2487 accompanying a second Notice of Appeal submitted on 10/27/87. Thus, one of these fees should be refunded.

At issue is the propriety of Examiner's rejection of claims 143 and 144 under 35 U.S.C. 103 as being unpatentable over Walker and Pintell.

PRO SE APPLICANT

Subject application and appeal are being prosecuted by Applicant without the benefit of counsel.

CONCISE EXPLANATION OF INVENTION

The invention is consisely described by claim 143, as follows.

143. The combination of:

rectifier means (27/28/29/31) connected with an ordinary electric utility power line and operative to provide a DC voltage across a set of DC terminals (38/39);

inverter means (24) having control input means (bases of transistors 42/43), the inverter means being connected with the DC terminals and operative to provide a substantially squarewave voltage across a pair of squarewave output terminals (conductor 37 and junction 44) in response to a drive signal being provided to the control input means;

an L-C series-circuit having a tank-capacitor (52) and a tank-inductor (51), and being effectively connected across the squarewave output terminals;

load means (26) effectively connected in parallel with the tank-capacitor; and

feedback means (47/49) connected in circuit between the squarewave output terminals and the control input means, the feedback means: i) comprising saturable inductor means (53/54) effectively connected with the control input means, and ii) being operative to provide the drive signal; thereby to cause the inverter to self-oscillate at a frequency equal to or higher than the natural resonance frequency of the L-C series-circuit;

whereby: i) most of the real power provided from the squarewave output terminals flows into the load means, and ii) the saturable inductor means and the L-C series-circuit are co-determinative of the frequency of self-oscillation.

#### AUTHORITIES

In general, Applicant wishes to rely on the authority of Natural Law, Common Law, and Statutory Law. In particular, Applicant wishes to rely on paragraph 103 of the Patent Law as interpreted in accordance with Natural Law (i.e., reality, facts, truths) and Common Law (esp. common/ordinary usage of words, terms, phrases, language).

Thus, in paragraph 103, the term "person having ordinary skill in the art" is interpreted by way of the plain meaning of the words actually used -- as interpreted in light of definitions and explanations provided by well accepted ordinary dictionaries of the English language.

Also, Applicant wishes to rely on the authorities identified in the attached write-up entitled "AUTHORITIES".

#### ARGUMENTS IN SUPPORT OF ALLOWABILITY

Examiner rejected claims 143 and 144 under 35 U.S.C. 103 as being unpatentable over Walker in view of Pintell or, alternatively, vice versa.

Applicant traverses these rejections for the following reasons.

(a) Examiner asserts that:

"it would have been obvious to use Pintell's inverter of figure 6 in the generally disclosed square wave oscillator configuration shown on the front page of Walker".

In view of Authority #8, Examiner seems to be misinterpreting the law by "equating that which is within the capabilities of the skilled designer with obviousness".

In particular, Examiner has provided no evidence to the effect that there existed an obvious advantage in combining Pintell with Walker (or vice versa) in such exact manner as to attain the claimed invention as specifically defined.

What might this obvious advantage be?

Clearly, without expected advantage, no motivation could possibly exist.

Equally clearly, absent expected advantage, Examiner's proposed combination must be viewed as arbitrary: concocted for the purpose of attaining the claimed invention, not because it leads to an advantage plainly and clearly suggested by the applied references.

In other words, starting with Walker -- who already teaches apparently adequate means to provide a sinusoidal output voltage to a load parallel-connected with an L-C circuit -- what obvious advantage would be expected from incorporating the teachings of Pintell in such exact manner as to arrive at the claimed invention as it is specifically defined?

Or, starting with Pintell -- who already teaches apparently adequate means to provide a sinusoidal current to a load series-connected with the an L-C circuit -- what obvious advantage would be expected from incorporating the teachings of Walker in such exact manner as to arrive at the claimed invention as it is specifically defined?

In other words, what might be the plain and clear rationale of a person of ordinary skill in the relevant art for selecting -- from among the tens of thousands of references associated with this art, all of which presumably present in his mind's library -- Pintell to combine with Walker or, conversely, Walker to combine with Pintell in such exact manner as to attain the claimed invention as specifically defined?

(b) Examiner then makes the following two statements:

(1) "Where a sinusoidal load voltage is required, it would have been obvious to connect the load across capacitor C as in Walker"; and

(2) "Where a sinusoidal current was desired through the load, it would have been obvious to connect it as in Pintell".

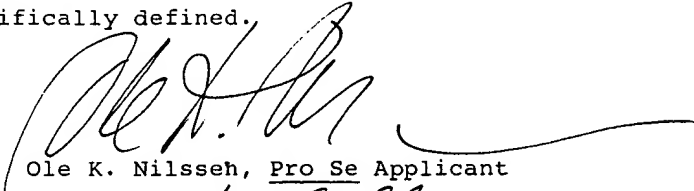
Assuming, for sake of argument, that those statements were true, in what way do they constitute evidence of obviousness with respect to combining the two references?

In fact, the two statements would rather seem to lead to the following conclusion:

(x) where a sinusoidal load voltage be desired, Walker's arrangement would seem appropriate; but

(y) where a sinusoidal load current be desired, Pintell's circuit would seem appropriate.

Hence, Examiner has not proven that there existed obvious motivation for combining the two references, let alone combining them in such exact manner as to attain the claimed invention as it is specifically defined.

  
Ole K. Nilssen, Pro Se Applicant  
Date: 1-29-88

### CLAIMS

143. The combination of:

rectifier means connected with an ordinary electric utility power line and operative to provide a DC voltage across a set of DC terminals;

inverter means having control input means, the inverter means being connected with the DC terminals and operative to provide a substantially squarewave voltage across a pair of squarewave output terminals in response to a drive signal being provided to the control input means;

an L-C series-circuit having a tank-capacitor and a tank-inductor, and being effectively connected across the squarewave output terminals;

load means effectively connected in parallel with the tank-capacitor; and

feedback means connected in circuit between the squarewave output terminals and the control input means, the feedback means: i) comprising saturable inductor means effectively connected with the control input means, and ii) being operative to provide the drive signal; thereby to cause the inverter to self-oscillate at a frequency equal to or higher than the natural resonance frequency of the L-C series-circuit;

whereby: i) most of the real power provided from the squarewave output terminals flows into the load means, and ii) the saturable inductor means and the L-C series-circuit are co-determinative of the frequency of self-oscillation.

144. The combination of:

rectifier means connected with an ordinary electric utility power line and operative to provide a DC voltage across a set of DC terminals;

inverter means comprising a first and a second transistor connected in circuit with the DC terminals, each transistor having a control input, the transistors being operative, in response to drive signals provided at their control inputs, to alternately conduct, thereby to cause the inverter means to provide a substantially squarewave voltage across a pair of squarewave output terminals;

an L-C series-circuit having a tank-capacitor and a tank-inductor, and being effectively connected across the squarewave output terminals;

load means effectively connected in parallel with the tank-capacitor; and

feedback means connected in circuit between the squarewave output terminals and the control inputs, the feedback means comprising saturable inductor means and being operative to provide the drive signals, thereby to cause the inverter to self-oscillate at a frequency equal to or higher than the natural resonance frequency of the L-C series-circuit;

whereby: i) most of the real power provided from the squarewave output terminals flows to the load means; and ii) the saturable inductor means and the L-C series-circuit jointly determine the frequency of self-oscillation.

#### AUTHORITIES

1. "patentable invention may lie in discovery of source of problem even though remedy may be obvious once source of problem is identified" (In re Sponnoble, 405 F.2d 578, 160 USPQ 237, 1969);

2. "A patentable invention within the ambit of 35 U.S.C. 103 may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose, without producing anything beyond the result inherent in their use" (In re Sponnoble, 405 F.2d 578, 160 USPQ 243, 1969);

3. "Where unobvious aspect of invention resides in recognition of source of problem, Patent Office inquiries should be directed, in part at least, to question of whether such a recognition would have been obvious to one of ordinary skill in the art; inquiry must go beyond the nature of the solution" (In re Roberts, 470 F.2d 1399, 176 USPQ 313, 1973);

4. "we also believe that a more proper, albeit not exclusive, inquiry in a case such as this is to look further as to the reasons for making the combination" (In re Sponnoble, 405 F.2d 578, 160 USPQ 243, 1969);

5. "If there is no evidence that a person of ordinary skill in the art at time of applicant's invention would have expected problem to exist at all, it is not proper to conclude that invention which solves this problem, which is claimed as an improvement of prior art device, would have been obvious to that hypothetical person". (In re Nomiya, 184 USPQ 608, 1975)

6. "There must be a reason apparent at time invention was made to person of ordinary skill in the art for applying the teaching at hand, or use of teaching as evidence of obviousness will entail prohibited hindsight". (In re Nomiya, 184 USPQ 608, 1975)

7. In Geiger v. PTO (Appeal No. 86-1103 at the CAFC) the CAFC stated that: i) obviousness "can not be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination", and ii) "one skilled in the art might find it obvious to try various combinations ... However, this is not the standard of 35 U.S.C. 103".

#8. In re Sung Nam Cho (Appeal No. 86-973 at the PTO) the Board of Appeals concluded that the examiner had misstated the law by "equating that which is within the capabilities of the skilled designer with obviousness".

#9. In Richdel, Inc. v. Sunspool Corp. (714 F.2d 1573 -- Fed Cir. 1983), Chief Judge Markey presented a detailed rejection of the doctrine of combination patents: "It was error for the district court to derogate the likelihood of finding patentable invention in a combination of old elements. No species of invention is more suspect as a matter of law than any other. Attempted categorization for the purpose of determining various "rules" detracts from what should be the sole question: whether the claimed invention would have been obvious within the meaning of paragraph 103. Most, if not all, inventions are combinations and mostly of old elements".

#10. In Adams (356 F.2d 998 -- CCPA 1966), the Board (of Appeals) was reversed because "neither reference contains the slightest suggestion to use what it discloses in combination with what is disclosed in the other." (356 F.2d at 1002)

#11. In Imperato (486 F.2d 585 -- CCPA 1973): although combining the references' teachings yielded the result claimed, the CCPA held that the combination was not obvious "unless the art also contains something to suggest the desirability of the combination".

#12. In Sernaker (702 F.2d at 995-96), the CAFC interpreted Imperato to mean that "prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings".

#13. In Environmental Design (713 F.2d at 698), the CAFC stated: "That all elements of an invention may have been old (the normal situation), or some old and some new, or all new, is however, simply irrelevant" [to obviousness].

#14. In Fromson v. Advance Offset Plate (755 F.2d 1556), the CACF stated as follows. (Underlining by Applicant)

"Where, as here, nothing of record plainly indicates that it would have been obvious to combine previously separate process steps into one process, it is legal error to conclude that a claim to that process is invalid under paragraph 103."



#15. In Kimberly-Clark Corporation v. Johnson & Johnson (745 F.2d at 1449), the CAFC stated as follows. (Underlining by Applicant)

"examining all the references of record, we fail to find a clear suggestion of the claimed subject matter. ---- The holding of invalidity on the ground of obviousness is therefore reversed."

#16. In Kansas Jack (719 F.2d at 1144), the CAFC stated that "one may not use the teachings of the present invention as a guide to interpretation of the prior art".

Selected Paragraphs from MPEP (Underlining by Applicant)

706.02 Rejection on Prior Art

"After indicating that the rejection is under 35 U.S.C. 103, there should be set forth (1) the difference or differences in the claim over the applied reference(s), (2) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (3) an explanation why such proposed modification would be obvious"

706.07 Final Rejection

"present practice does not sanction hasty and ill-considered final rejections. The applicant who is seeking to define his invention in claims that will give him the patent protection to which he is justly entitled should receive the cooperation of the examiner to that end, and not be prematurely cut off in the prosecution of his case"

"The examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal is prosecuted"

"In making the final rejection, all outstanding grounds of rejection of record should be carefully reviewed, and any such grounds relied on in the final rejection should be reiterated. They must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal"

"where a single previous Office action contains a complete statement of a ground of rejection, the final rejection may refer to such a statement and also should include a rebuttal of any arguments raised in the applicant's response"